US Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Office of Pipeline Safety

Hazardous Liquid IMP Field Verification Inspection
49 CFR Parts 195.450 and 195.452

General Notes:

1. This Field Verification Inspection is performed on field activities being performed by an Operator in support of their Integrity Management Program (IMP).
2. This is a two part inspection:
   i. A review of applicable Operations and Maintenance (O&M) and IMP processes and procedures applicable to the field activity being inspected to ensure the operator is implementing their O&M and IMP Manuals in a consistent manner.
   ii. A Field Verification Inspection to determine that activities on the pipeline and facilities are being performed in accordance with written procedures or guidance.
3. Not all parts of this form may be applicable to a specific Field Verification Inspection, and only those applicable portions of this form need to be completed. The applicable portions are identified in the Table below by a check mark. All sections of the form must be marked either "Satisfactory"; "Unsatisfactory"; or Not Checked ("N/C").

Operator Inspected: _____

Op ID: _____

Perform Activity *(denoted by mark)*	Activity Number	Activity Description
	1A	In-Line Inspection
	1B	Hydrostatic Pressure Testing
	1C	Other Assessment Technologies
	2A	Remedial Actions
	2B	Remediation – Implementation
	3A	Installed Leak Detection System Information
	3B	Installed Emergency Flow Restrictive Device
	4A	Field Inspection for Verification of HCA Locations
	4B	Field Inspection for Verification of Anomaly Digs
	4C	Field Inspection to Verify adequacy of the Cathodic Protection System
	4D	Field inspection for general system characteristics

Hazardous Liquid IMP Field Verification Inspection Form

Name of Operator:
_____

Headquarters Address:
Company Official:
Phone Number:
Fax Number:
Operator ID:
Activity ID:

Persons Interviewed	Title	Phone No.	E-Mail
:	**Primary Contact**		

OPS/State Representative(s): _____ Dates of Inspection: _____

Inspector Signature: _____
System Descriptions:

Site Location of field activities:

Key Documents Reviewed:

Document Title	Document No.	Rev. No	Date

Part 1 - Performance of Integrity Assessments

1A. In-Line Inspection (Protocol 3.04 & 3.05)	Satisfactory	Unsatisfactory	N/C	Notes:
Verify that Operator's O&M and IMP procedural requirements (e.g. launching/receiving tools) for performance of ILI were followed.				
Verify Operator's ILI procedural requirements were followed (e.g. operation of trap for launching and receiving of pig, operational control of flow), as appropriate.				
Verify ILI tool systems and calibration checks before run were performed to ensure tool was operating correctly prior to assessment being performed, as appropriate.				
Verify ILI complied with Operator's procedural requirements for performance of a successful assessment (e.g. speed of travel within limits), as appropriate.				
Document ILI Tool Vendor and Tool type (e.g. MFL, Deformation). Document other pertinent information about Vendor and Tool, as appropriate				
Other:				

1B. Hydrostatic Pressure Testing (Protocol 3.06)	Satisfactory	Unsatisfactory	N/C	Notes:
Verify that hydrostatic pressure tests complied with Part 195 Subpart E requirements.				
Review documentation of Hydrostatic Pressure Test parameters and results. Verify test was performed without leakage and in compliance with Part 195 Subpart E requirements.				
Review test procedures and records and verify test acceptability and validity.				
Review determination of the cause of hydrostatic test failures, as appropriate.				
Document Hydrostatic Pressure Test Vendor and equipment used, as appropriate.				
Other:				

1C. Other Assessment Technologies (Protocol 3.07)	Satisfactory	Unsatisfactory	N/C	Notes:
Verify that application of "Other Assessment Technology" complied with Operator's requirements, that appropriate notifications had been submitted to OPS, and that appropriate data was collected.				
Review documentation of notification to OPS of Operator's application of "Other Assessment Technology". Verify compliance with Operator's procedural requirements and performance of assessment within parameters originally submitted to OPS.				
Verify that appropriate tests are being performed and appropriate data is being collected, as appropriate.				
Other.				

Part 2 - Remediation of Anomalies

2A. Remedial Actions – Process (Protocol 4.1)	Satisfactory	Unsatisfactory	N/C	Notes:
Verify that remedial actions complied with the Operator's procedural requirements.				
Witness anomaly remediation and verify documentation of remediation (e.g. Exposed Pipe Reports, Maintenance Report, any Data Acquisition Forms). Verify compliance with Operator's O&M Manual and Part 195 requirements.				
Verify that Operator's procedures were followed in locating and exposing the anomaly (e.g. any required pressure reductions, line location, identifying approximate location of anomaly for excavation, excavation, coating removal).				
Verify that procedures were followed in measuring the anomaly, determining the severity of the anomaly, and determining remaining strength of the pipe.				
Other:				

2B. Remediation - Implementation (Protocol 4.02)	Satisfactory	Unsatisfactory	N/C	Notes:
Verify that the operator has adequately implemented its remediation process and procedures to effectively remediate conditions identified through integrity assessments or information analysis.				
Verify that repairs were completed in accordance with the operator's prioritized schedule and within the time frames allowed in §195.452(h).				
Review any changes to the schedule. Ensure that the changes to the schedule were justified by the operator and the schedule changes were demonstrated not to jeopardize public safety or environmental protection, as appropriate.				
Review any documentation of cases where OPS was notified that the repair schedule could not be met, remediation exceeded the time frames allowed in §195.452(h), and safety could not be provided through a reduction in operating pressure.				
Review any documentation of cases for an immediate repair condition (§195.452(h)(4)(i) where operating pressure was reduced or the pipeline was shutdown. Verify for an immediate repair condition that temporary operating pressure was determined in accordance with the formula in Section 451.7 of ASME/ANSI B31.4 or, if not applicable, the operator should provide an engineering basis justifying the amount of pressure reduction.				
Verify that repairs were performed in accordance with §195.422 and the Operator's O&M Manual, as appropriate.				
Review CP readings at anomaly dig site, if possible. (See Part 4 of this form – "Field Inspection to Verify adequacy of the Cathodic Protection System" , as appropriate.				
Other:				

Part 3 - Preventive and Mitigative Actions

3A. Installed Leak Detection System Information (Protocol 6.05)	Satisfactory	Unsatisfactory	N/C	Notes:
Identify installed leak detection systems on pipelines and facilities that can affect an HCA.				
Document leak detection system components installed on system to enhance capabilities, as appropriate.				
Document the frequency of monitoring of installed leak detection systems and verify connection of installed components to leak detection monitoring system, as appropriate,				
Other:				

3B. Installed Emergency Flow Restrictive Device (Protocol 6.06)	Satisfactory	Unsatisfactory	N/C	Notes:
Verify additional preventive and mitigative actions implemented by Operator.				
Document Emergency Flow Restrictive Device (EFRD) component(s) installed on system. Note that EFRD per §195.450 means a check valve or remote control valve as follows: (1) Check valve means a valve that permits fluid to flow freely in one direction and contains a mechanism to automatically prevent flow in the other direction. (2) Remote control valve or RCV means any valve that is operated from a location remote from where the valve is installed. The RCV is usually operated by the supervisory control and data acquisition (SCADA) system. The linkage between the pipeline control center and the RCV may be by fiber optics, microwave, telephone lines, or satellite.				
Document the frequency of monitoring of installed EFRDs and verify connection of installed components to monitoring/operating system, as appropriate.				
Comment on the perceived effectiveness of the EFRD in mitigating the consequences of a release on the HCA that it is designed to protect.				
Other:				

Part 4 - Field Investigations (Additional Activities as appropriate)

4A. Field Inspection for Verification of HCA Locations	Satisfactory	Unsatisfactory	N/C	Notes:
Review HCAs locations as identified by the Operator. Utilize NPMS, as appropriate.				
Verify population derived HCAs in the field are as they appear on Operator's maps and NPMS, as appropriate. Document newly constructed (within last 2-3 years) population and/or commercial areas that could be affected by a pipeline release, as appropriate. Note that population derived HCAs are defined in §195.450				
Verify drinking water and ecological HCAs in the field are as they appear on Operator's maps and NPMS, as appropriate. Document newly established drinking water sources and/or ecological resources areas (within last 2-3 years) that could be affected by a pipeline release. Note that unusually sensitive areas (USAs) are defined in §195.6				
Verify commercially navigable waterway HCAs in the field are as they appear on Operator's maps and NPMS, as appropriate. Document any activity (commercial in nature) that could affect the waterways status as a commercially navigable waterway, as appropriate. Note that commercially navigable waterway HCAs are defined in §195.450				

4B. Field Inspection for Verification of Anomaly Digs	Satisfactory	Unsatisfactory	N/C	Notes:
Verify repair areas, ILI verification sites, etc.				
Identify anomaly dig sites in the area, if possible, that will not be investigated as part of this field activity (e.g. three other digs to be performed in this area, but not part of this inspection)				

4C. Field Inspection to Verify adequacy of the Cathodic Protection System	Satisfactory	Unsatisfactory	N/C	Notes:
In case of hydrostatic pressure testing, Cathodic Protection (CP) systems must be evaluated for general adequacy.				
Review records of CP readings from CIS and/or annual survey to ensure minimum code requirements are being met, if available.				
Review results of random field CP readings performed during this activity to ensure minimum code requirements are being met, if possible.				
Perform random rectifier checks during this activity and ensure rectifiers are operating correctly, if possible.				

4D. Field inspection for general system characteristics	Satisfactory	Unsatisfactory	N/C	Notes:
Through field inspection determine overall condition of pipeline and associated facilities for a general estimation of the effectiveness of the operator's IMP implementation.				
Visit nearby pump stations, valve settings, aboveground crossings, etc. to ensure minimum code requirements are being met, if possible and as appropriate.				
Evaluate condition of the ROW to ensure minimum code requirements are being met, as appropriate.				
Comment on Operator's apparent commitment to the integrity and safe operation of their system, as appropriate.				
Other				